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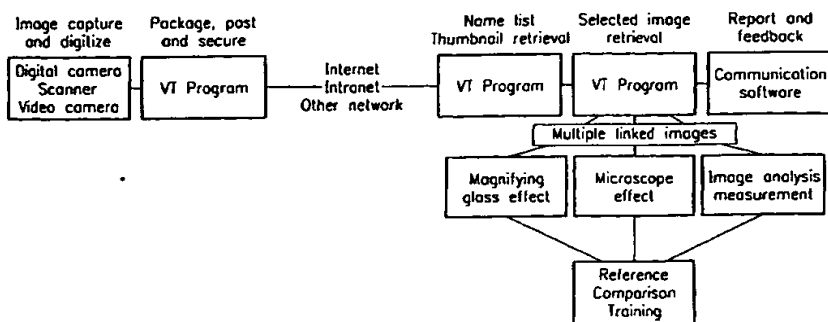
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(54) Title: VIRTUAL TELEMICROSCOPE

Principle of the Virtual Telemicroscope System



Computer station one

Computer station two

Note: Functions of the two computers can be reversed. Both can send and receive images.

(57) Abstract: A method and system that uses a computer system as a telemicroscope. A plurality of images of a specimen are captured (Digital camera scanner video camera). The images correspond to the entire specimen and a plurality of segments of the specimen (Multiple linked images). The high-resolution images corresponding to said plurality of segments have different magnification levels and locations (magnifying glass effect); a linking map is generated between said images (Multiple linked images). The linking map comprises information regarding geographical location of the images in relation to the specimen's structure (Image geographical measurement); and images and said linking map are transmitted to a remote user via a computer network thereby allowing the user to view the images with different magnification levels without compromising in image clarity (Computer station one and computer station two). The transmitted images are viewed in a dynamic manner, permitting the user to navigate, enlarge, measure, compare, annotate and exam the digitized images on a virtual slides displayed on a computer screen (Image analysis measurement). The operation of the system closely mimics that of a light microscope.

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